



Fig. 1.—Showing eruption as it appeared on the dorsum of the forearm.

was so ill that she called the doctor to see her at her home because of great discomfort. She stated that on the preceding night she had applied to the dorsum of her arms and to her cheeks some freckle cream. The quantity used was not over one gram. Stated that she had a very uncomfortable and restless night, and that when she awakened in the morning she noted that her eyes, face, neck, and arms were swollen and itchy. She washed her skin carefully with soap and water, and applied zinc oxid ointment as per directions in literature accompanying the jar of cream, but enjoyed no relief; on the contrary she found that she was considerably less comfortable than she was before its application.

I saw the patient at about 10 a. m., at which time there was a papular eruption on the dorsum of both arms and on the face. There was also, but in a less marked degree, a similar eruption of the thorax, front and back, and the front of the abdomen. There were present also a few similar lesions on the medial sides of both thighs. The lesions occurred symmetrically, and wherever the lesions occurred there was pruritus and burning. There was a marked edema of the eyelids and face, as well as the neck; wherever the lesions were could also be found edema. Temperature 99.6 degrees and pulse 82. Temperature returned to normal in three days. Blood and urine examination revealed no pathology.

Calamin lotion with one per cent nupercain was used locally, and prescribed ephedrin sulphate, grain three-quarters, and sodium bromid, grains 3, were used in capsule form.

Patient's subjective symptoms began to disappear immediately, and within seven days left her without any annoying skin symptoms; but it was not until three weeks later that she was entirely free from symptoms, because each time she would perspire the sites of application of the ointment would cause her some discomfort with burning and itching. The chief type of lesions developed was that of a folliculitis, as is evident from the accompanying photograph.

On a previous occasion this patient had a similar experience from the use of 1-5000 bichlorid of mercury as a wash for an external otitis. Lesions similar to the ones described above developed on the skin wherever the wash came in contact with it, and the same set of subjective symptoms developed locally, as did with the present illness, but confined to the area of involvement.

508 West Santa Barbara Avenue.

ADDISON'S DISEASE

REPORT OF CASE TREATED BY ESCHATIN

By WILLIAM FITCH CHENEY, M. D.

San Francisco

IN past years of practice only six patients can be recalled that were under personal observation and diagnosed as having Addison's disease. All of these patients died within a year, and some of them within a few weeks after the diagnosis was made, irrespective of the plan of treatment employed. Recently, however, another patient has been under observation who is not only alive nearly two years since first seen, but has been relieved of all the original manifestations. Such a deviation from previous experience seems to justify report and explanation.

REPORT OF CASE

Mrs. B., age twenty-seven, first came for advice on September 28, 1931. She had left her home in the interior of this state in January, 1931, for a trip abroad. She was well, apparently, until she reached Cairo, Egypt, the following May. Then she was taken ill with persistent nausea and vomiting, whether she ate or not, accompanied by prostration and weakness, lasting for ten days; but without pain in her abdomen or elsewhere. She noted at this time that her color seemed darker than before. There followed an interval of two or three weeks when she felt fairly well again, though her skin continued to be abnormally dark. Deciding to return home, she reached Jugo Slavia, when another attack occurred, again characterized by nausea, vomiting, and prostration; and this time several weeks passed before she felt well enough to proceed upon her journey. She managed finally to cross the ocean without any serious recurrence, and remained fairly well until she reached the United States. Then, in the latter part of August and during September, her attacks reappeared, for several days at a time. She had never felt perfectly well since the onset of her illness in May, but always was "terribly weak"; and though better and worse at intervals, her illness had never entirely disappeared. She complained that she constantly felt exhausted, and worn out by any exertion. She had no appetite, was always more or less nauseated, especially on rising in the morning, and had lost considerable weight. She observed also that her color had gradually grown much darker since leaving Egypt, the pigmentation increasing steadily, mostly on exposed surfaces of the body, but also in other parts. There had been no disturbance of her menstrual periods at any time, nor of her bowels.

On physical examination the patient was still fairly well nourished, weighing 138 pounds. The striking feature about her appearance was her color. This was due to a brownish-black pigmentation of face, neck, hands and forearms, so extreme that she resembled a negress. Her lips particularly were black, and the palms of her hands showed brown lines in every crease. There was similar brown-black pigmentation irregularly distributed on the dorsum of the tongue, the inner surface of the cheeks, the gums, the soft palate, and the pharynx. When the clothing was removed the pigmentation was seen to involve also the

trunk, the limbs, and the external genitalia. Particularly dark were the mammary nipples and areola, the vaccination scars on arms, all spots where insect bites had been acquired in Europe, and the waistline where skirt-bands had pressed.

Next in significance to the color was the evidence of serious disturbances in the circulation. The heart rate was 92 at rest. Its rhythm was regular and its sounds were clear, but weak and lacking force. The blood pressure was so low that at times it was difficult to detect it; and the systolic reading was never above 70 to 80. No evidence of disease was found in the lungs. The liver and spleen were not enlarged. The abdominal and pelvic organs presented no abnormality. Blood examination showed only a slight secondary anemia and a negative Wassermann. The urine was normal in every respect.

COMMENT

It is not in order at this time to discuss the details of differential diagnosis; but the combination of violent gastric disturbances in recurring attacks, the extreme general pigmentation of the body and the circulatory asthenia shown by a weak, rapid heart and an excessively low blood pressure, made up a picture that could hardly be mistaken. Once the conclusion was reached that the case was one of Addison's disease, the first thought was of the Swingle-Pfiffner suprarenal cortex extract, from which such remarkable results had recently been reported at the Mayo Clinic. A telegram to Doctor Rowntree, offering to send the patient to him for treatment, brought the prompt response that a satisfactory product of the extract was not available at the time. Subsequent correspondence brought out the fact that further preparation of the Swingle-Pfiffner extract had been assumed by Parke, Davis & Company. This firm answered my inquiries, however, with the statement that none of this substance would be ready for use before the first week in November.

Thus there appeared to be no immediate prospect at the time of any plan of treatment different from that previously employed in such cases. The patient was placed in bed at Stanford Hospital. Powdered suprarenal cortex (Parke, Davis and Company) was ordered by mouth three times a day; one five-grain capsule, which soon had to be reduced in amount. Parke-Davis solution of adrenalin, 1 to 1000, was given twice a day hypodermatically, but not more than five minims at a dose could be tolerated. Twice a day, also, one ampoule of a solution of adrenocortin, made by a California firm, was given intragluteally, one cubic centimeter of which was said to represent five grams of adrenal cortex. But all these measures failed to relieve the weakness, prostration, anorexia, nausea and vomiting, or to raise the blood pressure. As described by Rowntree and Snell in their monograph on Addison's disease, doses of suprarenal cortex, given by mouth, were found to cause increased nausea unless they were kept small; and adrenalin injections likewise, except in inadequate dosage, caused the patient such pronounced tremor that she begged to have the remedy discontinued. As regards the ampoules of adrenocortin, their failure to benefit was undoubtedly due to the weakness of the preparation; for one cubic centimeter represented, at

most, only five grams of adrenal cortex, while in the extract known as eschatin, ultimately put out by Parke, Davis & Company, one cubic centimeter represents 30 grams.

Thus, during the month of October, 1931, no improvement in the patient's condition could be noted. On the contrary, she grew weaker and weaker, unable to eat, unable to keep what little food she did eat, unable to get out of bed or even to sit up in bed without faintness. It seemed that there was little or no hope, and that the end was near. Finally, after repeated correspondence with Doctor Lescohier, of Parke, Davis & Company, which must have tried his patience, in despair a telegram was sent on November 7 advising that my patient was so low the new extract must be sent at once if any good was to be accomplished. That same afternoon their answer came by wire: "Two ten cubic centimeter vials eschatin air mail today"; and at midnight the next day the package was delivered here. Never in many years of practice has any experience given an equal sense of elation.

Next morning, the first dose of eschatin was administered. Parke, Davis & Company had warned that the supply was very limited, so that only one cubic centimeter was injected for this first dose. Each day subsequently this was repeated, while all other medication was discontinued. Within a week definite improvement was noted. Appetite returned and a feeling of well-being. Nausea and vomiting ceased. Strength returned gradually, so that in ten days the patient was able to be up and about her room. On December 12 she was well enough to be allowed to leave the hospital and return to her home. Never since then has her trouble recurred. On the contrary, she has not only remained free from any serious symptoms, but has been able to attend constantly to her household duties and to go about as she pleases, in her home or on the street, without any sense of fatigue greater than she ever experienced before her illness. The blood pressure little by little increased until now, for several months past, it has averaged 110 systolic. The pigmentation has gradually disappeared to such a degree that no one now would be attracted by any peculiarity in the patient's appearance; but the color has never become entirely normal, though it continues gradually to improve.

During the early part of 1932 the daily dose of eschatin was increased to 1.5 cubic centimeters, and during the latter half of the year to 2 cubic centimeters. This increase was not prompted by any serious relapse, but simply by the patient's complaint that she did not feel as energetic as before. The dose can be still further enlarged as desired, as time goes on, if developments require it. When last seen, on June 16, 1933, this patient apparently was in good health, with no complaint to make of any kind. She still takes 2 cubic centimeters of eschatin by injection every day, which she has learned to administer to herself as diabetic patients do with insulin.

My thanks are due to Doctor Rowntree for helpful advice at the outset; and to Parke, Davis & Company for allowing their extract to be used in this case, even before it was ready for general distribution. It will undoubtedly be a satisfaction to them to know that by this action they aided in saving a life.

210 Post Street.

Even in the populous districts, the practice of medicine is a lonely road which winds uphill all the way, and a man may easily go astray and never reach the delectable mountains unless he early finds those shepherd guides of whom Bunyan tells—Knowledge, Experience, Watchful, and Sincere (Osler).—*Weekly Bulletin, California Department of Public Health.*